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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/516,918	07/08/2005	Meinhard Schwefer	09600-00026-US	5228	
	78 7590 03/14/2008 ONNOLLY BOVE LODGE & HUTZ LLP			EXAMINER	
1875 EYE STREET, N.W. SUITE 1100 WASHINGTON, DC 20036			VANOY, TIMOTHY C		
			ART UNIT	PAPER NUMBER	
			1793		
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			03/14/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/516,918	SCHWEFER ET AL.
Office Action Summary	Examiner	Art Unit
	TIMOTHY C. VANOY	1793
The MAILING DATE of this communication appeariod for Reply	ppears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perio  - Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO 1.136(a). In no event, however, may a reply be ti d will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 11     This action is <b>FINAL</b> . 2b) ☑ The 3) ☐ Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal matters, pr	
Disposition of Claims		
4) ☐ Claim(s) 1-22 is/are pending in the application 4a) Of the above claim(s) is/are withdred is/are allowed.  5) ☐ Claim(s) 1-14 is/are allowed.  6) ☐ Claim(s) 15-22 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and are subjected to by the Examing the specification is objected to by the Examing the drawing(s) filed on 06 December 2004 is	rawn from consideration.  /or election requirement.  ner.	ted to by the Examiner.
Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	ection is required if the drawing(s) is ob	pjected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents.</li> <li>2. Certified copies of the priority documents.</li> <li>3. Copies of the certified copies of the priority application from the International Bure</li> <li>* See the attached detailed Office action for a list</li> </ul>	nts have been received. nts have been received in Applicat iority documents have been receiv au (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal I 6)  Other:	ate

#### **DETAILED ACTION**

### **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) In claim 22, the phrase "in particular" renders the claims vague and indefinite because preferences and examples are properly set forth in the specification rather than the claims: please see section 2173.05(d) in the MPEP.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15-21 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/51181 A1 to Schwefer et al. *Please note that US 2003/0143141 A1 is relied on as an English translation of WO 01/51181 A1.* 

The English abstract of WO-181 describes a method and apparatus for removing  $NO_x$  and  $N_2O$  out of process gases and exhaust gases, comprising:

passing the contaminated gas through a first reaction zone containing an iron-loaded zeolite so that N<sub>2</sub>O is removed from the contaminated gas;

injecting ammonia into the contaminated gas, and

passing the ammonia/contaminated gas mixture through a second reaction zone also containing an iron-loaded zeolite so that  $NO_x$  is removed from the gas.

Pg. 7 Ins. 22-33 in the text of WO-181 seems to teach that the reaction zones are operated at a temperature of less than 500 °C; the reaction zones are operated at a pressure of 1 to 50 bars, and the gas passing through the reaction zones are at a space velocity ranging from 2 to 200,000 hours<sup>-1</sup>.

In particular, note that paragraph no. 0028 in US 2003/0143141 A1 (the English equivalent of WO-181) discloses that the form of the catalyst may be that of a tubular reactor or a radially-arranged basket reactor, which appears to meet the "hollow cylinder" limitations of Applicants' claim 15.

Claims 1-14 and 22 have not been rejected under either 35USC102 or 35USC103 because the Applicants have persuasively shown that the process of WO 01/51181 A1 describes the reduction of the N<sub>2</sub>O gas to levels ranging from 1 to 200

ppm over the first catalyst bed (see pg. 5 lns. 21-23 in WO 01/51181 A1 and also see paragraph no. 0026 in the English equivalent US 2003/0143141 A1). The Applicants' independent claims 1 and 22 require the reduction of the  $N_2O$  to levels that are greater than 200 ppm after passage over the first catalyst bed.

### Response to Arguments

Applicants' arguments submitted with the Amendment filed on Feb. 11, 2008 with respect to the 35USC103 rejection of the claims 1-14 over WO 01/51181 A1 to Schwefer have been fully considered and are persuasive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY C. VANOY whose telephone number is (571)272-8158. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Timothy C Vanoy Primary Examiner Art Unit 1793

tcv

/Timothy C Vanoy/ Primary Examiner, Art Unit 1793